PATENT APPLICATION

1201.68381

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Graciela W. Padua

Serial No.:

10/667,986

Conf. No.:

1967

Filed:

9/22/2003

For:

METHOD OF MANUFACTURING

IMPROVED CORN ZEIN RESIN FILMS, SHEETS, AND ARTICLES

Art Unit:

1732

Examiner:

Unassigned

I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.

Mar. 4,2004

Date

Registration No. 🧕

F-CLASS.WCM

Appr. February 20, 1998

Attorney for Applicant(s)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This IDS is submitted under 37 C.F.R. §1.97(b) within either of the following time periods, whichever occurs last:

- (a) within three months of either the filing date of the national application or the date of entry into the national stage; or
- (b) before the mailing date of first office action on the merits (i.e., not including actions such as restriction requirements).

Applicant(s) submit herewith Form PTO-1449 (Information Disclosure Citation) together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 C.F.R. §1.56. Applicant(s) respectfully submit that the citation of any reference on Form PTO-1449 does not constitute an admission that the reference qualifies as prior art.

It is requested that the information disclosed on the enclosed Form PTO-1449 be made of record in this application.

The Commissioner is hereby authorized to charge any additional fees which may be required to this application under 37 C.F.R.§§1.16-1.17, or to credit any overpayment, to Deposit Account No. 07-2069. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

Telephone: (312) 360-0080 Facsimile: (312) 360-9315

Customer Number 24978

Chicago, Illinois 60606

300 South Wacker Drive – Suite 2500

Arik B. Ranson

Registration No. 43,874

(Rev. 8-88)	Patent and Trader	Attorney Docket No.: 1201.68381		Serial No.: 10/667,986						
				Applicant:						
ฟิร์ชีกฟล์TION DISCLOSURE CITATION (Use several sheets if necessary)				Graciela Wild Padua						
					Filing Date: 9/22/2003	Group:				
MAR 0 8 2004	<u> </u>		II S D	ATEN	DOCUMENTS		1732			
Evaminer	<u>0</u>		1	AILI	I DOGGINEIA13		1	Filing	Date	
Examiner	Document Number	Date			Name	Class	Subclass		ropriate	
		9/1995		Porter et al.			ļ	ļ		
	5,182,130			Haralampu et al.						
		2/1993		Visser et al.						
ļ	· ·	2/1995		Trouve			<u> </u>	ļ		
	5,523,293	6/1996		Jane et al. Krochta et al.				ļ		
ļ							ļ			
	5,922,379	12/1996		Takahashi et al. Wang		· · · · · · · · · · · · · · · · · · ·				
	6,379,725			Wang						
1	0,379,723				ENT DOCUMENTS		<u> </u>	<u> </u>		
<u> </u>			T		Translation					
	Document Number	Date			Country	Class	Subclass	Yes	No	
	2214920	9/1989	Great	Britain	<u> </u>					
 	06 192577 A	7/1994	Japan	1			 	abs		
	WO 01/83597	11/2001	WIPO)	·		<u> </u>			
	OTHER	DOCUMENTS	(Includ	ding Au	ithor, Title, Date, Pertin	ent Pages, Etc.)			
	Andres (ed.), Edible films have potential for significantly improving aesthetic and nutritional content of foods, Food Processing, pp. 102-130 (1985).									
	Andres (ed.), Natural edible coating has excellent moisture and grease barrier properties, Food Processing, pp. 48-49 (Dec. 1984).									
	Anker, Edible and biodegradable films and coatings for food packaginga literature review, Part of a Ph.D. work at the Department of Food Science, Chalmers University of Technology, Sweden (1996).									
	Damodaran (ed.), Food proteins and their applications, pp. 529-549 (1997).									
	Gennadios et al., Edible films and coatings from wheat and corn proteins, Food Technology, pp. 63-69 (1990).									
	Gennadios et al., Property modification of edible wheat, gluten-based films, American Society of Agricultural Engineers, vol. 36(2), pp. 465-470 (1993).									
	Ha et al., Extrusion processing of zein-based biodegradable plastics, Abstracts from the Sixteenth Annual Midwest Food Processing Conference, IFT Regional Conference, LaCrosse, WI (1997).									
	Ha et al., Extrusion processing of zein-based biodegradable plastics, Book of Abstracts (59E-15), Institute of Food Technologists Annual Meeting, Atlanta, GA (1998).									
	Izzo et al., Protein-lipid interaction during single-screw extrusion of zein and corn oil, Cereal Chemistry, vol. 66(1), pp. 47-50 (1989).									
Examiner Date Considered										
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.										

Form PTO (Rev. 8-88	-1449 U.S. Department of Commerce) Patent and Trademark Office	Attorney Docket No.: 1201.68381	Serial No.: 10/667,986						
	•	Applicant:							
JINEORMA	TION DISCLOSURE CITATION	Graciela Wild Padua							
1	al sheets if necessary)	Filing Date:							
MAR 0 8 2004	<u> </u>	9/22/2003	1732						
Mak o -	OTHER DOCUMENTS (Including	g Author, Title, Date, Pertinent Pages, Etc	.)						
a ok	*/		<u> </u>						
PATENT & TR									
	Krochta et al., Edible and biodegradable polymer films: challenges and opportunities, Food Technology, vol. 51, No. 2, pp. 61-74 (1997).								
	Lai et al., Development of corn zein-based biodegradable resins, Book of Abstracts (53C-8), Institute of Food Technologists Annual Meeting, New Orleans, LA (1996).								
	Lai et al., Effect of processing method of water barrier properties of zein-based films, Book of Abstracts (77-4), Institute of Food Technologists Annual Meeting, Orlando, FL (1997).								
	Lai et al., Properties and microstructure of plasticized zein films, Cereal Chemistry, vol. 74(6), pp. 771-775 (1997).								
	Lai et al., Properties and microstructure of zein sheets plasticized with palmitic and stearic acids, Cereal Chemistry., vol. 74, No. 1, pp. 83-90 (1997).								
	Lai et al., Structure characterization of biodegradable zein resin films by x-ray diffraction, Book of Abstracts (77B-45), Institute of Food Technologists Annual Meeting, Atlanta, GA (1998).								
	Lai et al., Water vapor barrier properties of zein films plasticized with oleic acid, Cereal Chemistry 75(2), pp. 194-199 (1998). Lai et al., X-ray diffraction characterization of the structure of zein-oleic acid films, Journal of Applied Polymer Science, vol. 71, pp. 1267-1281 (1999). Lai, Preparation of zein-based biodegradable materials and the investigation of their physical properties, Ph.D. Thesis, University of Illinois (1997).								
	Masco-Arriola et al., Plasticization of corn zein with unsaturated fatty acids, Paper submitted to Dept. of Food Science and Human Nutrition, University of Illinois (1997). Masco-Arriola, Preparation and evaluation of biodegradable plastics derived from corn zein, M.S. Thesis, University of Illinois (1996).								
	Padua et al., Biodegradable plastics, Biobased products Expo '04, (1994).								
	Padua et al., Properties of biodegradable plastics derived from corn proteins, Proceedings from the Third Biomass Conference of the Americas, Montreal, Canada, Aug. 24-29, 1997. Padua, Biodegradable resins from corn by-products, Presentation to AOSCA 6th Annual Identity Preserved Crops Conference (1995).								
	Park et al., Fatty acid concentration effect on tensile strength, elongation, and water vapor permeability of laminated edible films, Journal of Food Science, vol. 59(4), pp. 916-919 (1994). Park et al., Properties of edible coatings for fruits and vegetables, Paper presented to the American Society of Agricultural Engineers (1990).								
	Reiners et al., Corn proteins: potential for their industrial use, "Industrial Uses of Cereal," Am. Assoc. of Cereal Chemists, St. Louis, MO, pp. 285-298 (undated).								
	Santosa et al., Effect of fatty acid content on tensile properties of zein-based biodegradable resin sheets, Book of Abstracts (69A-10), Institute of Food Technologists Annual Meeting, Orlando, FL (1997).								
Examiner		Date Considered							
*Examiner	: Initial if citation considered, wheth	er or not citation is in conformance with M and not considered. Include copy of this	PEP 609; Draw line through form with next						

		<u> </u>					
Form PTO-1449 U.S. Department of Commerce (Rev. 8-88) Patent and Trademark Office	Attorney Docket No.: 1201.68381	Serial No.: 10/667,986					
l`′	Applicant:						
INFORMATION DISCLOSURE CITATION	Graciela Wild Padua						
(Use several sheets if necessary)	Filing Date:	Group:					
ARD 8 2004	9/22/2003	1732					
OTHER DOCUMENTS (Inclu	iding Author, Title, Date, Pertinent Page	es, Etc.)					
Santosa et al., Tensile and water absorption Sixteenth Annual Midwest Food Processing C	properties of zein-fatty acid biodegrada	ble resins, Abstracts from the					
Santosa et al., Tensile Properties and Water Journal of Agriculture and Food Chemistry, v		with Oleic and Linoleic Acids,					
	Santosa, Thermal behavior of zein sheets plasticized with oleic and linoleic acids, Book of Abstracts (59E-16), Institute of Food Technologists Annual Meeting, Atlanta, GA (1998).						
	Spence et al., Dialdehyde starch and zein plastic: mechanical properties and biodegradability, Journal of Environmental Polymer Degradation, vol. 3(2), pp. 69-74 (1995).						
							
		<u>,</u>					
Examiner	Date Considered						
	nether or not citation is in conformance nce and not considered. Include copy ont.						